SYSTEMS AND METHODS FOR ELECTROSURGICAL TREATMENT OF TURBINATES

ABSTRACT OF THE DISCLOSURE

The present invention provides systems and methods for selectively applying electrical energy to a target location within the head and neck of a patient's body, particularly including tissue in the ear, nose and throat. In one aspect, a method is provided for reducing the volume of enlarge swollen tissue in the patient's nose, such as swollen nasal tissue, mucus membranes, turbinates, polyps, neoplasms, cartilage (e.g., the nasal septum) or the like. In particular, the turbinates are treated by positioning one or more electrode terminal(s) adjacent to the turbinates, and delivering electrically conductive fluid, such as isotonic saline, to the nasal cavity to substantially surround the electrode terminal(s) with the fluid. High frequency voltage is applied between the electrode terminal(s) and one or more return electrode(s) to remove a small tissue segment, channel or hole from the region near or in the turbinates to shrink the turbinates and prevent swelling, due to the formation of scar tissue as the wound heals. The high frequency voltage may be selected to effect a small amount of thermal damage to the walls of the channel or hole to facilitate the formation of scar tissue without extending this thermal damage beyond the immediate region of the target site.